Docket No.: 42P16360

100

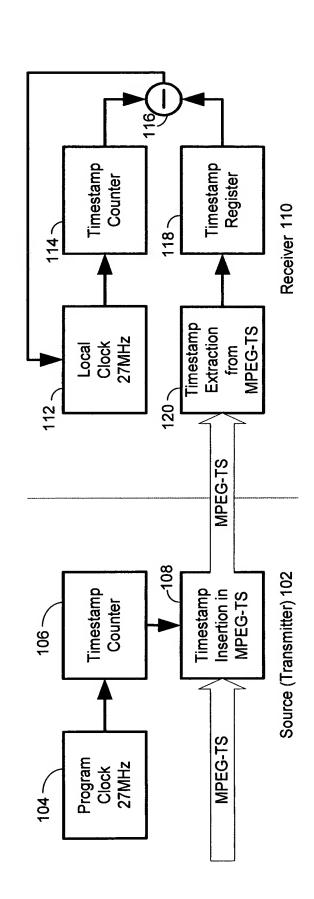


FIG. 1

Blakely, Sokoloff, Taylor & Zafman LLP
Title: A TIMESTAMPING NETWORK CONTROLLER FOR STREAMING
MEDIA APPLICATIONS

1st Named Inventor: Dmitrii Loukianov Express Mail No.: EV325528030US Sheet: 2 of 8

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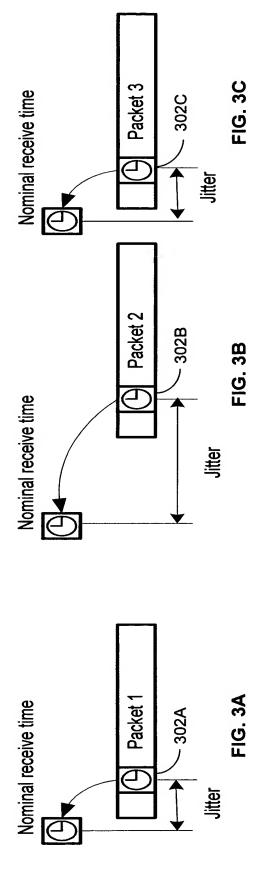
200 **MPEG-TS PACKETS** 208 206 ~ HEADER RTP UDP HEADER 204 HEADER <u>a</u> 202

FIG. 2

Blakely, Sokoloff, Taylor & Zafman LLP (503) 684-6200 Title: A TIMESTAMPING NETWORK CONTROLLER FOR STREAMING MEDIA APPLICATIONS

1st Named Inventor: Dmitrii Loukianov Express Mail No.: EV325528030US Sheet: 3 of 8

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400

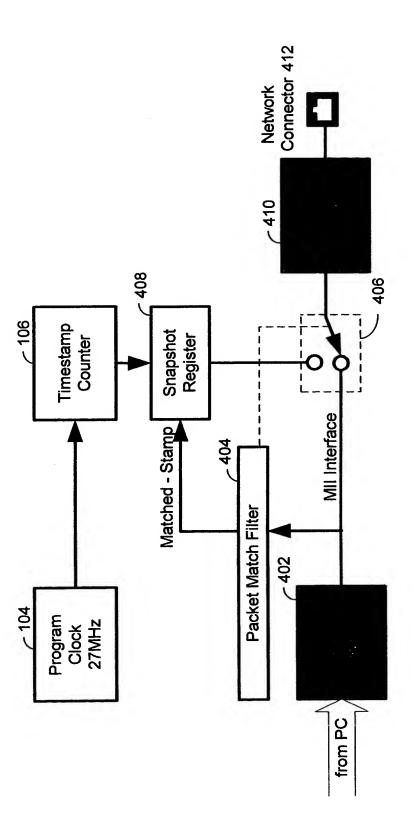


FIG. 4

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<u>500</u>

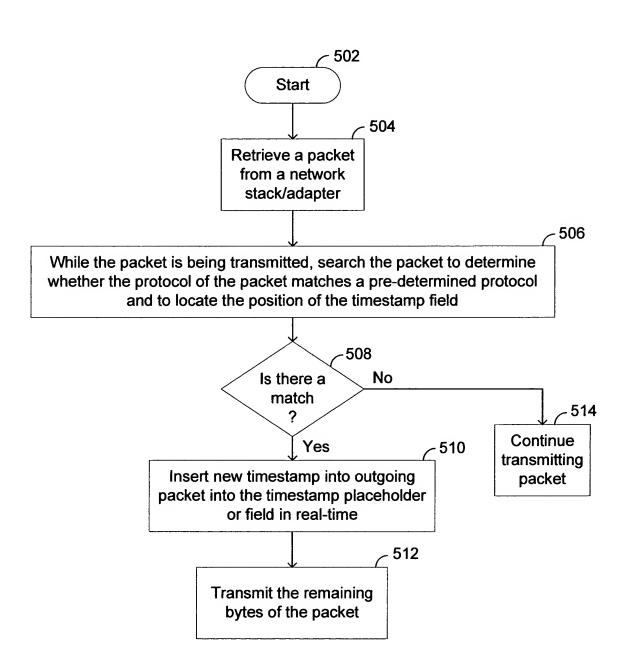


FIG. 5

Blakely, Sokoloff, Taylor & Zafman LLP
Title: A TIMESTAMPING NETWORK CONTROLLER FOR STREAMING
MEDIA APPLICATIONS

1st Named Inventor: Dmitrii Loukianov Express Mail No.: EV325528030US Sheet: 6 of 8

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to PC 009 -608 -604 Timestamp Snapshot Register Counter Matched - Stamp MII Interface Packet Match Filter 909 Feedback Signal -602 Program 27MHz From PC Clock 610 Connector Network

FIG. 6

Blakely, Sokoloff, Taylor & Zafman LLP (503) 684-62 Title: A TIMESTAMPING NETWORK CONTROLLER FOR STREAMING (503) 684-6200 MEDIA APPLICATIONS 1st Named Inventor: Dmitrii Loukianov Express Mail No.: EV325528030US Docket No.: 42P16368 Sheet: 7 of 8 **700** 702 Start - 704 Receive packet from network - 706 Search the received packet to determine if the packet matches a pre-determined protocol and to locate the timestamp field 708 is there a No match - 718 The received Yes 710 packet is sent to a PC Determine a local timestamp in realtime at the instant the timestamp field is located 712 Append the local timestamp to the received packet if the packet is valid - 714 Forward the received packet to a memory buffer and then to a software stack in the PC -716

FIG. 7

Determine an error signal for adjusting the frequency of the local program clock

Blakely, Sokoloff, Taylor & Zafman LLP (503) 684-6200 Title: A TIMESTAMPING NETWORK CONTROLLER FOR STREAMING MEDIA APPLICATIONS

'1st Named Inventor: Dmitrii Loukianov Express Mail No.: EV325528030US

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Docket No.: 42P16363

<u>716</u>

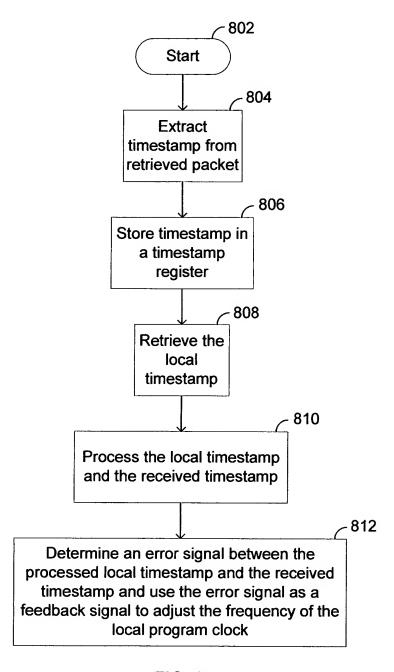


FIG. 8